

## REMARKS

Claims 1-8 are pending in the application. Claims 1-8 are rejected.

Independent claims 9 and 10 have been newly added. These claims are supported by the original specification and claims. No new matter has been added.

The present invention relates to a system of synchronization of signals received in a base station. The claimed invention particularly emphasizes the relation between a first and second synchronized word detecting windows. The second synchronized word detecting window covers a position of a synchronized word within the first synchronized word detecting window, which corresponds to the relation between AP1 and AP2 in Fig. 2 of the present application. The position of the second synchronized word detecting window is reset as related to the first synchronized word detecting window under a predetermined condition, as defined in dependent claims 3-8.

Claims 1-3, 5 and 7-8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Petch et al. (Petch).

Petch describes a system where end-to-end synchronization between a mobile station and a respective base station is maintained during an established communication link by early/late analysis of subsequently received base station timing pulses. The mobile station adjusts timing and the output frequency of the mobile station master clock and codec to maintain the synchronization based on the timing pulses.

The Office Action has considered a first synchronized word /GPS timing pulse detecting window as fine adjust window, and a second synchronized word /GPS timing pulse detecting window as coarse adjust window, by referring to the description, col. 8 lines 28-45 of Petch.

Petch teaches in col. 8 lines 28-45, three overlapping windows, “no adjust window”, “a fine adjust window” and “a coarse adjust window”, and it is determined whether a GPS timing pulse transmitted by a GPS satellite falls in either of these windows. In addition, the description states if the timing pulse falls outside the fine adjust window but within a coarse adjust window, the counter is incremented or decremented, and if it falls outside the coarse adjustment window the counter is reset to an initialized state.

Petch indicates adjustment of a counter, depending on in which window the timing signal falls. This adjustment of the counter moves all three windows by the adjustment amount. All the windows remain the same relative to each other.

Petch fails to suggest resetting the position of the second synchronized word detecting window as related to the first synchronized word detecting window under a predetermined condition.

Applicant’s claim 1 recites: “a control means for resetting the position of the second synchronized word detecting window as related to the first synchronized word detecting window under a predetermined condition”

Therefore Applicant claims resetting the position of one window relative to the other window, whereas Petch teaches adjusting the windows relative to the GPS timing pulse.

Applicant’s new claims similarly recite this distinguishing feature.

This feature also relates to claims 3-8, which define further define the predetermined condition, under which the position of the second synchronized word detecting window is reset.

With regard to applicant’s claim 2, the Office Action asserts the counter is adjusted to optimize the possibility of detecting the synchronized word by both first and second windows.

However Applicant's claims 2 recites the position of the second synchronized word detecting window is reset as related to the first synchronized word detecting window under a predetermined condition as defined in claim 1, and claim 2 further recites that the detecting means detects the synchronized word within the second synchronized word detecting window in the next frame, when the synchronized word detecting means detects the synchronized word in the first synchronized word detecting window.

Claim 4 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Petch as applied to claim 1 and further in view of Hosford and claim 6 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Petch further in view of Mowbray.

With regard to claim 4 and 6, neither of Hosford nor Mowbray teach the deficiency of the Petch reference as pointed out above.

For at least the foregoing reasons it is respectfully submitted the rejections of claims 1-8 are traversed and these claims are in condition for allowance.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Versions with markings to show changes made."

In view of the amendments and remarks set forth above, this application is in condition for allowance which action is respectfully requested. However, if for any reason the Examiner should consider this application not to be in condition for allowance, the Examiner is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action.

Any fee due with this paper may be charged to Deposit Account No. 50-1290.

Respectfully submitted,



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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

IN THE CLAIMS:

Please amend the claims as follows:

1.(amended) A synchronization protecting and setting system for signals received in a radio base station comprising:

a first means for generating a first synchronized word detecting window, which covers a position of a synchronized word provided in a reception signal [a reference timing for transmission in] received at the radio base station;

a second means for generating a second synchronized word detecting window, which covers the position of the synchronized word [in] within the first synchronized word detecting window;

a means for detecting the synchronized word in the first or second synchronized word detecting window; and

a control means for resetting the position of the second synchronized word detecting window [in] as related to the first synchronized word detecting window under a predetermined condition.

2.(amended) The system according to claim 1,

wherein [the second synchronized word detecting window is controlled so that] when the synchronized word detecting means detects the synchronized word in the first synchronized word detecting window, the detecting means detects the synchronized word [is] within the second synchronized word detecting window in the next frame.

3.(amended) The system according to claim 1,

wherein the synchronized word is formed of plural bits, and the control means resets the position of the second synchronized word detecting window, when a bit error rate of the synchronized word is more than a predetermined value, as the predetermined condition.

4.(amended) The system according to claim 1,

wherein the reception signal further includes a color code formed of plural bits, and the control means resets the position of the second synchronized word detecting window, when a bit error rate of the color code is more than a predetermined value, as the predetermined condition.

5.(amended) The system according to claim 1,

wherein the control means resets the position of the second synchronized word detecting window, when [a] an average amount of phase difference [of phases], in the number of frames of the signals received in the radio base station is more than a predetermined value, as the predetermined condition.

6.(amended) The system according to claim 1,

wherein the control means resets the position of the second synchronized word detecting window, when the result of BCH decoding for signals received in the radio base station is mistaken, as the predetermined condition.

7.(amended) The system according to claim 1,

wherein the control means resets the position of the second synchronized word detecting windows, when the result of CRC arithmetic for signals received in the radio base station is mistaken, as the predetermined condition.

8.(amended) The system according to claim 1,

wherein the control means resets the position of the second synchronized word detecting window, when a level of the signal received in the radio base station is less than a predetermined value, as the predetermined condition.